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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SINGH, RACHNA

ART UNIT PAPER NUMBER

2176

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/699,572

Applicant(s)

GRIGORIEV, NIKOLAI

Examiner

Rachna Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

1. This application is responsive to communications: Amendment filed 7/26/04.
2. Claims 1-20 are pending. Claims 1, 8, and 15 are independent claims.
3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/13/05 has been entered.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao et al., US 5,883,635, 3/16/99 (filed 11/15/96) in view of Chatterjee et al., US 6,584,476 B1, 6/24/03 (filed 4/22/00).

In reference to claim 1, Rao teaches producing a single-image view of a multi-image table using graphical representations of the table data. Rao teaches the following:

-Receiving a table having comprised of rows and columns. See column 1, lines 50-67. The intersection of the row and column is a cell. The information in the table reaching

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portions beyond a single cell because of the large amount of information. See column

2. The cells of the table arranged in a plurality of rows and columns. See column 7, lines 38-55. Compare to ***“receiving a table having one or more cells wherein each cell spans one or more columns and one or more rows”***.

-Representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data. See column 5, lines 60-67 and column 6. Compare to ***“representing the table as a geometric grid wherein one or more positions within the grid house one or more of the cells.”***

-Receiving an image display request from a user interaction device. The request including a request for an operation and information identifying the requested operation. The processor receiving the request configured to access the data store in memory and the instruction indicating instructions for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Compare to ***“providing a generic table represented by one or more formatting commands operable to provide a rendering of the grid to one or more output media’***.

Rao does not state the use of “formatting commands to provide a rendering of the grid”; however, he does teach receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a “formatting command” as Rao teaches that the user can request certain actions to

indicate some sort of operation be performed on the data as would a formatting command. See columns 28-29.

Rao does not teach that each cell is assigned a "synchronization marker" or that the table is configurable; however, Chatterjee does. A user can choose to delete a row from a database table or modify the structure of the table. See column 22, lines 47-50 and column 28, lines 64-67. Compare to **"wherein the size of the generic table is configurable"**. Chatterjee teaches a version control system in which a database table comprising fields includes a synchronization value in record versions to indicate that two records are synchronized. See column 18, lines 36-51 and figure 2. Chatterjee's synchronization value indicates when the values in records are similar so that if a record is later modified, then two record versions are synchronized by determining whether the synchronization values in the field are the same. Compare to **"wherein each cell is assigned a synchronization marker"**. Chatterjee further teaches allowing a user to make changes to the design and update the database with the changes. See column 2, lines 20-54. Chatterjee's version control subsystem determines when two record versions in two states are synchronized by determining whether the synchronization values in the field are the same. If the synchronization values are the same, then any modifications made to a record are associated with each record that is synchronized. See column 21, lines 1-20. Compare to **"when the grid is rendered to one or more output media each cell having a same synchronization marker are processed together as an independent group"**. It would have been obvious to a person of ordinary skill in the art at the time of the invention to enhance Rao's system of

producing a single-image view of a multi-image table using graphical representations of table data with Chatterjee's teaches of synchronization among different records because it would help facilitate associations with different records in the database, allow conflicts between records to be resolved while providing an efficient means to unify records or cells with similar data. See abstract of Chatterjee.

In reference to claim 2, Rao teaches representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data. See column 5, lines 60-67 and column 6.

In reference to claim 3, Rao teaches displaying the table in a virtual screen or presentation space for a window or to the area for printing or facsimile transmission. See columns 28-29.

In reference to claims 5-6, Rao teaches representing the table in an n-dimensional array data structure which could be a rectangle or two-dimensional array.

In reference to claim 7, Rao does not state the use of "formatting commands to provide a rendering of the grid"; however, he does teach receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed.

In reference to claim 8, Rao teaches producing a single-image view of a multi-image table using graphical representations of the table data. Rao teaches the following:

-Receiving a table having comprised of rows and columns. See column 1, lines 50-67.

The intersection of the row and column is a cell. The information in the table reaching portions beyond a single cell because of the large amount of information. See column

2. The cells of the table arranged in a plurality of rows and columns. See column 7,

lines 38-55. Compare to ***“decoupling one or more cells from a table” and***

“expressing a dimension associated with each cell in terms of each cell’s relative position to each other within the matrix”.

-Representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data. .

See column 5, lines 60-67 and column 6. An n-dimensional array is a matrix. Compare to ***“storing the cells in a matrix.”***

-Receiving an image display request from a user interaction device. The request including a request for an operation and information identifying the requested operation.

The processor receiving the request configured to access the data store in memory and the instruction indicating instructions for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Compare to

“outputting one ore more formatting commands operable to produce a rendition of the table on a output media from the matrix”.

Rao does not state the use of “formatting commands to provide a rendering of the grid”; however, he does teach receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed. It would have

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been obvious to one of ordinary skill in the art at the time of the invention to provide a "formatting command" as Rao teaches that the user can request certain actions to indicate some sort of operation be performed on the data as would a formatting command. See columns 28-29.

Rao does not teach that each cell is assigned a "synchronization marker" or that the table is configurable; however, Chatterjee does. A user can choose to delete a row from a database table or modify the structure of the table. See column 22, lines 47-50 and column 28, lines 64-67. Chatterjee teaches a version control system in which a database table comprising fields includes a synchronization value in record versions to indicate that two records are synchronized. See column 18, lines 36-51 and figure 2. Chatterjee's synchronization value indicates when the values in records are similar so that if a record is later modified, then two record versions are synchronized by determining whether the synchronization values in the field are the same. Compare to **"associating a synchronization marker with each cell"**. Chatterjee further teaches allowing a user to make changes to the design and update the database with the changes. See column 2, lines 20-54. Chatterjee's version control subsystem determines when two record versions in two states are synchronized by determining whether the synchronization values in the field are the same. If the synchronization values are the same, then any modifications made to a record are associated with each record that is synchronized. See column 21, lines 1-20. Compare to **"wherein each of the one or more formatting commands are processed to render the rendition against a same group of cells that have a same synchronization marker"**. It would

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have been obvious to a person of ordinary skill in the art at the time of the invention to enhance Rao's system of producing a single-image view of a multi-image table using graphical representations of table data with Chatterjee's teaches of synchronization among different records because it would help facilitate associations with different records in the database, allow conflicts between records to be resolved while providing an efficient means to unify records or cells with similar data. See abstract of Chatterjee.

In reference to claims 9-10 and 14, Rao teaches receiving an image display request from a user interaction device. The request including a request for an operation and information identifying the requested operation. The processor receiving the request configured to access the data store in memory and the instruction indicating instructions for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Rao further teaches does teach receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed (i.e. processing vertically, in parallel).

In reference to claim 11, Rao teaches representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data. See column 5, lines 60-67 and column 6.

In reference to claims 12-13, Rao teaches receiving an image display request from a user interaction device. The request including a request for an operation and information identifying the requested operation. The processor receiving the request configured to access the data store in memory and the instruction indicating instructions

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for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Rao further teaches does teach receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed, such as configuring the output or adjusting dimensions.

In reference to claim 15, Rao teaches producing a single-image view of a multi-image table using graphical representations of the table data. Rao teaches the following:

-Receiving a table having comprised of rows and columns. See column 1, lines 50-67. The intersection of the row and column is a cell. The information in the table reaching portions beyond a single cell because of the large amount of information. See column 2. The cells of the table arranged in a plurality of rows and columns. See column 7, lines 38-55.

-Representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data. See column 5, lines 60-67 and column 6. Compare to ***“representing one or more cells of a table”***

-Receiving an image display request from a user interaction device. The request including a request for an operation and information identifying the requested operation. The processor receiving the request configured to access the data store in memory and the instruction indicating instructions for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Compare to “.

.with one or more executable commands wherein each command has one or more parameters defining an outputted cell's dimensions on an output media"

Rao teaches that the request including a request for an operation and information identifying the requested operation. The processor receiving the request configured to access the data store in memory and the instruction indicating instructions for the operating system. Displaying the table in a virtual screen or presentation space for a window. See columns 28-29. Rao does not state the use of "formatting commands to provide a rendering of the grid"; however, he does teach receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a "formatting command" as Rao teaches that the user can request certain actions to indicate some sort of operation be performed on the data as would a formatting command. See columns 28-29.

Rao does not teach that each cell is assigned a "synchronization marker" or that the table is configurable; however, Chatterjee does. A user can choose to delete a row from a database table or modify the structure of the table. See column 22, lines 47-50 and column 28, lines 64-67. Chatterjee teaches a version control system in which a database table comprising fields includes a synchronization value in record versions to indicate that two records are synchronized. See column 18, lines 36-51 and figure 2. Chatterjee's synchronization value indicates when the values in records are similar so that if a record is later modified, then two record versions are synchronized by

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determining whether the synchronization values in the field are the same. Compare to ***“associating with each cell a synchronization marker”***. Chatterjee further teaches allowing a user to make changes to the design and update the database with the changes. See column 2, lines 20-54. Chatterjee’s version control subsystem determines when two record versions in two states are synchronized by determining whether the synchronization values in the field are the same. If the synchronization values are the same, then any modifications made to a record are associated with each record that is synchronized. See column 21, lines 1-20. Rao teaches receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed (i.e. processing vertically, in parallel). Compare to ***“executing commands in parallel to produce a rendition of the table on the output media, and wherein each command processed in parallel to produce the rendition processes against cells in a same group associated with a same synchronization marker”***. It would have been obvious to a person of ordinary skill in the art at the time of the invention to enhance Rao’s system of producing a single-image view of a multi-image table using graphical representations of table data with Chatterjee’s teaches of synchronization among different records because it would help facilitate associations with different records in the database, allow conflicts between records to be resolved while providing an efficient means to unify records or cells with similar data. See abstract of Chatterjee.

In reference to claims 4 and 18, Rao does not teach that the table or first format is in XSL. However, XSL data can comprise a table, thus it would have been obvious to one of ordinary skill in the art at the time of the invention to have the table be in a XSL format as XSL was a well-known format for representing style and content of data at the time of the invention.

Claims 16-17 and 19 are rejected under the same rationale used in claims 7, 2, and 3 respectively above.

In reference to claim 20, Rao teaches representing a table in an n-dimensional array data structure where the positional relationship of data arrange by rows and columns conveys information about the data. See column 5, lines 60-67 and column 6. Thus the data structure has different dimensions than the table.

Response to Arguments

6. Applicant's arguments and amendments submitted on 04/13/05 have been fully considered.

Applicant argues the combination of Rao and Chatterjee cannot result in the Applicant's invention because the combination would result in a system of rendering data having multiple versions. In other words, the synchronization in Chatterjee is directed to versioning of information between records having multiple versions and not to render a table. Applicant further argues Chatterjee does not suggest that the presentation process may be improved by grouping an operation for rendering a table based on independent groups having the same synchronization marker. Examiner respectfully disagrees. Chatterjee's teachings demonstrate that it was desirable to a

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person of ordinary skill in the art at the time of the invention help facilitate associations with different records in the database as well as allow conflicts between records to be resolved while providing an efficient means to unify records or cells with similar data.

See abstract of Chatterjee. Applicant's argument appears to believe that the synchronization of cells in multiple versions would prohibit the same synchronization to be implemented to a single table. Examiner disagrees. Processing cells having the same synchronization marker are taught and well-known in the art at the time of the invention as taught by Chatterjee. A person of ordinary skill in the art at the time of the invention would not be restricted or limited to providing this functionality within the cells of multiple versions or a single table. In other words, while Chatterjee's system teaches synchronization markers in cells among multiple versions, it does not exclude synchronization markers of cells within a single table. A database table comprises a plurality of record with at least one data field for storing data. Just because Chatterjee teaches synchronization markers of cells across multiple versions does not rule out that this synchronization could exist within a single presentation table. Chatterjee's system teaches record-level versioning so that conflicts with records in a database table as shown in figure 2 can be resolved. A person of ordinary skill in the art at the time of the invention would be motivated to provide Chatterjee's record synchronization system within a single table for similar reasons as to why one would provide them across multiple tables – in order to unify records and facilitate associations among records. Furthermore, the claim limitations as recited does not prevent a system from providing

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synchronization markers among multiple versions. Simply because it exists within a single table does not mean it cannot be extended to multiple tables.

Applicant argues that "formatting commands to provide a rendering of grid" is not taught by Rao. Examiner respectfully disagrees. Rao teaches receiving an image display request in which the user request can comprise of any number of actions the user considers necessary for indicating a valid request and causing an operation to be performed. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a "formatting command" as Rao teaches that the user can request certain actions to indicate some sort of operation be performed on the data as would a formatting command. See columns 28-29. Applicant states that Rao does not specifically teach that a user provides formatting commands in this context.

In view of the comments above, the rejection is maintained.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachna Singh whose telephone number is 571-272-4099. The examiner can normally be reached on M-F (8:30AM-6:00PM). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136.

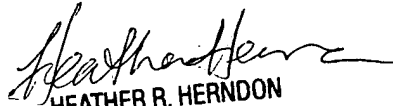
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RS

06/17/05


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